

ABSTRACT OF THE DISCLOSURE

Disclosed are a turbo code encoder and a code rate decreasing method thereof. The turbo code encoder includes: a first convolutional encoder for receiving a bit to be encoded, and generating a systematic bit and a first parity bit; an interleaver for receiving the bit to be encoded, in parallel with the first convolutional encoder, and interleaving the received bit; and a second convolutional encoder for receiving the interleaved bit from the interleaver and generating a second parity bit. The code rate decreasing method of the turbo code encoder having a code rate of $1/3$ includes repeatedly outputting predefined bits among the bits output from the first and second convolutional encoders.